

Bliss Woods Preserve: Ecological Forestry in a Community Forest

Bliss Woods Preserve is an 80-acre community forest in Freeport, Maine, about 1.5 miles from the Harraseeket River and Casco Bay. Owned and managed by the New England Forestry Foundation (NEFF), with a conservation easement held by the Freeport Conservation Trust, the property demonstrates how a working forest can provide timber, store carbon, sustain wildlife habitat, and remain an accessible community resource.

Managed under NEFF's Exemplary Forestry principles, Bliss Woods provides a practical setting for examining how active, climate-smart silviculture can strengthen forest resilience while maintaining biodiversity, recreation, scenic values, and long-term economic productivity.

A Conservation and Working-Forest Legacy

The landscape has a long working-forest history. The property includes the site of the 1800s Merrill Homestead, and roughly 40-50 acres were harvested for larger spruce and firewood around the 1980s. NEFF acquired Bliss Woods in 2000. Following spongy moth impacts, a 2006 red oak salvage harvest treated about 20 acres and removed approximately 225 cords, predominantly red oak.

The property is dominated by red oak, white pine, and red spruce and includes mast-producing hardwood stands, mixed softwood cover, flooded wetlands, grassy openings, and a public trail network. This diversity allows participants to consider how forest structure, species composition, hydrology, and recreational use interact within a relatively small but intensively valued community forest.

Exemplary Forestry in Action

The winter-early spring 2025 harvest treated approximately 84 acres using thinning from below and commercial crop-tree release. A cut-to-length operation with a tracked processor and Logset forwarder removed poorer-quality and unacceptable growing stock (UGS) while releasing well-formed crop trees. Based on pre-harvest (2021) and post-harvest (2025) cruises, basal area declined from about 110 to 70 ft²/acre and the acceptable/unacceptable growing-stock ratio improved from 62/38 to 91/9, with 85% of UGS basal area removed. Removals focused particularly on field-origin white pine pulp, red maple, and other UGS, while red spruce was retained and released to encourage regeneration. Because Bliss Woods is also a heavily used community forest, operational design incorporated measures intended to protect ecological and social values:

- Trail layout responded to topography and existing recreational trails; operations avoided and buffered recreation trails as practicable, with aesthetics considered in the layout.
- Forwarding was conducted largely before sunrise to reduce equipment travel on soft ground, illustrating how timing can be adjusted to site conditions.
- Red spruce was retained and released throughout the harvest; maintaining and promoting this species remains a management priority.
- A 3-acre pre-harvest buckthorn treatment in fall 2024 used foliar and cut-stump methods around the former yard and main trail; a second foliar treatment followed in summer 2025.
- Summer 2026 timber stand improvement is planned across 17 acres of the 2006 salvage area to release and space white pine and red spruce using brushsaws and chainsaws.

The harvest removed approximately 1,448 cords (17.2 cords/acre), equivalent to about 46% of pre-harvest volume. Market availability also influenced implementation: the operation waited for a viable pine-pulp market before proceeding, underscoring the connection between silvicultural objectives and forest-product economics.

What Participants Will Examine

The site visit will use Bliss Woods as a field laboratory for discussing the practical tradeoffs and synergies involved in ecological forestry. Participants can compare treated and untreated conditions, observe regeneration and residual stand structure, and consider how management choices influence multiple objectives over time.

- Climate resilience — maintaining species and structural diversity, promoting vigorous residual trees, and preparing stands for changing disturbance and climate conditions.
- Biodiversity and habitat — retaining habitat features, sustaining mast-producing hardwoods and softwood winter cover, and protecting wetlands and sensitive areas.
- Sustainable timber and carbon — growing high-quality red oak and white pine for long-lived wood products while maintaining forest carbon stocks and future sequestration capacity.
- Invasive species management — integrating control of glossy buckthorn with harvesting and regeneration objectives.
- Community values — maintaining trails, scenic character, recreation, and public access while communicating why and how active management occurs.

Bliss Woods Preserve Map

